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SCHIFF HARDIN & WAITE  
Patent Department  
6600 Sears Tower  
233 South Wacker Drive  
Chicago, IL 60606

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MAYO, TARA L

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PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* LUDWIG EBERLER, MICHAEL EBERLER,  
WOLFGANG RENZ, and GUENTHER ZEBELEIN

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Appeal 2007-4547  
Application 10/726,251  
Technology Center 3600

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Decided: February 13, 2008

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Before DEMETRA J. MILLS, LORA M. GREEN, and  
RICHARD M. LEOVITZ, *Administrative Patent Judges*.

LEOVITZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-5, 7-9, 12, and 13. We have jurisdiction under 35 U.S.C. § 6(b). We affirm-in-part.

STATEMENT OF THE CASE

As explained in the Specification, structural components of medical devices, such as the radiofrequency body coil in a magnetic resonance spectroscope, are cumbersome to install (Spec. 1, 5). To address this

problem, the Specification describes a device that facilitates the installation and removal of a structural components, such as a body coil, from a medical installation.

Claims 1-5, 7-9, 12, and 13 are pending (App. Br.<sup>1</sup> 1). There is one rejection on appeal:

Claims 1-5, 7-9, 12, and 13 under 35 U.S.C. § 103(a) as obvious over Heinold (US Pat. Pub. 2002/0129446 A1, Sep. 19, 2002) in view of Reimann (US Pat. Pub. 2002/0104163 A1, Aug. 8, 2002) and Carper (US 4,727,328, Feb. 23, 1988) (Answer 3).

Claims 1, 12, and 13, which are representative of the claimed subject matter, read as follows:

1. A device to install and remove a structural component of a medical installation, said medical installation having a height-adjustable patient supporting apparatus separate from said structural component, said device comprising:
  - a two-part guide system attachable to said patient supporting apparatus and to said structural component;
  - a first of the two parts of said guide system comprising a first guide rail and a second of said two parts of said guide system comprising a guide groove, patient supporting apparatus being adapted to receive said guide rail thereon, and said guide system comprising a second guide rail mounted on said medical installation that, with appropriate positioning of said patient supporting apparatus, forms a linear, aligned extension of said first guide rail; and
  - said guide system, upon temporary, detachable placement of said structural component on said guide system on said patient supporting apparatus, guiding said structural component by sliding along said guide rail relative to said medical installation.

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<sup>1</sup> “App. Br.” refers to “Appellants’ Appeal Brief” dated stamped Sep. 25, 2006.

12. A method for installing and removing a structural component of a medical device comprising the steps of:  
    positioning a first part of a guide system at a height-adjustable patient supporting apparatus of the medical device;  
    forming a second part of the guide system on a structural component, separate from said patient supporting apparatus and temporarily detachably engaging said first part of said guide system with said second part of said guide system with said structural component on said guide system on said patient supporting apparatus; and  
    adjusting the height of the patient supporting apparatus to selectively raise and lower the structural component therein relative to said medical device, and sliding said structural component along said first and second parts of said guide system to install or remove said component relative to said medical device.

13. A magnetic resonance tomography device comprising:  
    a magnetic resonance scanner having a radio-frequency body antenna and a gradient system;  
    a height-adjustable patient supporting apparatus, separate from said radiofrequency antenna, adapted to receive a patient thereon to move said patient into and out of said magnetic resonance scanner; and  
    a device for installing and removing a structural component relative to said magnetic resonance scanner, said device comprising a two-part guide system having a first part attached to said height adjustable patient supporting apparatus and a second part attached to said structural component, said first part comprising a guide rail and said second part comprising a guide groove temporarily detachably engageable with said guide rail allowing said structural component, when placed on said patient supporting apparatus, to be slid along said guide rail relative to said magnetic resonance scanner.

## ISSUES ON APPEAL

The Examiner contends that Heinold describes a guide system comprising a guide rail and grooves to install and remove a structural component from a medical device (Answer 4) as in the claimed invention, but does not disclose a “height-adjustable patient supporting apparatus” or a “second guide rail” mounted on the medical installation as required by the claims (Answer 5). However, the Examiner states that these elements are described in the prior art and that persons of ordinary skill in the art would have been motivated to have included these elements in Heinold’s system to have made the claimed invention.

Appellants contend that Heinold does not describe a “structural component” that is separate from the “patient supporting apparatus” (App. Br. 9). Appellants also contend that the prior art does not describe a “second guide rail be a linear, aligned extension of the first guide rail” as required by claim 1 (App. Br. 11).

Thus, the issues in this appeal are: 1) whether the Examiner erred in finding that prior art describes a “structural component” that is separate from the “patient supporting apparatus”; and 2) whether the Examiner erred in finding that the prior art describes a “second guide rail be a linear, aligned extension of the first guide rail” as in claim 1.

## CLAIM INTERPRETATION

### Claim 1

Claim 1 is directed to a “device to install and remove a structural component of a medical installation.” The device is recited as comprising “a two-part guide system attachable to said patient supporting apparatus and to

said structural component.” The following elements are listed in the claim as part of the guide system: 1) a first guide rail; 2) a guide groove; and 3) a second guide rail.

Claim 1 characterizes the device as a device “to install and remove a structural component of a medical installation.” In the body of the claim, it is stated that the guide system is “attachable” to the structural component and that

upon temporary, detachable placement of said structural component on said guide system on said patient supporting apparatus, guiding said structural component by sliding along said guide rail relative to said medical installation.

We understand these limitations to be an intended use of the guide system to load the structural component into the medical installation. However, because there is no positive recitation in the claim that the device “comprises” the structural component, we do not interpret the device of claim 1 to include the structural component.

We also do not interpret “the medical installation having a height-adjustable patient supporting apparatus” to be part of the claimed device. The device’s “second guide rail” is described in claim 1 as “mounted on said medical installation” but there is no positive recitation in the claim that the medical installation having the “patient supporting apparatus” as a part of the device. The device is for performing an act on the medical installation and therefore we do not interpret the medical installation to be part of the device.

### Claim 13

Claim 13 is directed to a “magnetic resonance tomography device” comprising: 1) a magnetic resonance scanner; 2) a height-adjustable patient supporting apparatus; and a device for installing and removing a structural component. The device comprises “a two-part guide system having”: 3) a guide rail and 4) a guide groove. As with claim 1, the guide groove is described in claim 13 as attached to a structural component for sliding along the guide groove, but we do not interpret the claim to require the presence of the structural component.

### Claim 12

Claim 12 is a method claim “for installing and removing a structural component of a medical device” using a guide system. A “first part” of the guide system is positioned “at a height-adjustable patient supporting apparatus” in the first step of the claim. In the second step, a “second part” of the guide system is formed “on a structural component, separate from said patient supporting apparatus.” The third step involves adjusting the height of the patient supporting apparatus and sliding the structural component along the guide system to install or remove it from the medical device.

The phrase “a structural component, separate from said patient supporting apparatus” does not appear in the Specification. However, a person of ordinary skill in the art, upon reading the Specification, would interpret it to mean that the “structural component” is not an element of the “patient supporting apparatus,” but is independent from it and is the part to be installed into (or removed from) from the medical device (*see* Spec. 2-4). The “patient supporting apparatus” is used to lower or raise the structural

component relative to the medical device and thus has a different function than the structural component (Spec. 3; *see also* instant claim 12).

More specifically, in the description of the prior art, the Specification characterizes the installation and removal of components from medical devices as “complicated, since a service technician can not handle the removal of the old structural component and the installation of the new structural component alone, due to the dimensions and weight” (Spec. 1). The Specification identifies the radiofrequency body coil in a magnetic resonance spectroscopy device as an example of a structural component (Spec. 1, 5). To address this problem, the Specification describes a device to install and remove a structural component – such as radiofrequency body coil – in and out of a medical large device with the aid of a two-part guide system comprising a guide rail and a guide channel or groove (Spec. 2). The patient supporting apparatus is used to raise the structural component to the installation height, where is “subsequently slid (pushed)” into the medical device (Spec. 3). Thus, it is evident that structural component is not part of the patient supporting apparatus.

## DISCUSSION

### Claim 1

The Examiner finds that Heinold describes a first guide rail (Heinold, at ¶ 22 (“guide element 7” in Heinold’s Fig. 1) and a guide groove (Heinold, formed by the flange of element 5 shown in Heinold’s Fig. 3) as recited in claim 1 (Answer 4). Heinold does not describe a “second guide rail” – the third element of the claim – but the Examiner finds that Carper



as seen in Figure 1, show[s] a medical installation (i.e., a Nuclear Magnetic Resonance imaging device) comprising a plastic guide rail (16 and 18; col. 3, lines 7 through 9) that, with appropriate positioning of a patient table base (50), forms an extension for receiving a structural component (60) thereon (col. 3, lines 17 through 20)

(Answer 5).

The Examiner states that

it would have been obvious to one having ordinary skill in the art of magnetic resonance at the time the invention was made to further modify the device disclosed by Heinold . . . such that the medical installation would include a plastic second guide rail as taught by Carper . . . . The motivation would have been to provide support to the structural component while in the medical installation.

(Answer 6).

Appellants do not challenge the Examiner's findings regarding Heinold's teaching of a first guide rail, a guide groove, and the motivation to modify it with Carper's teachings, but they contend that Heinold does not teach a "structural component" or a "second guide rail" (App. Br. 9, 11).

We are not persuaded by either of these arguments that the Examiner erred. Claim 1, as we have interpreted it, does not require the presence of a structural component (*see supra* Claim Interpretation, at p. 5). Thus, Appellants' argument relies on a limitation that is not found in claim 1. For this reason, it is unnecessary for us to consider Appellants' argument any further.

As for the "second guide rail," we agree with the Examiner that Carper shows guide rails 16 and 18 in Figure 1 and that, when aligned with the guide rail 7 of Heinold, Carper's guide rails would form a linear extension with it as required by the claim.

Appellants argue

claim 1 does not merely require that the second guide rail be linear and aligned with the first guide rail, but instead requires that the second guide rail be a linear, aligned extension of the first guide rail. Appellants fail to see how either of the two parallel guide rails in the Carper et al. reference can be considered "an extension" of the single guide rail disclosed in the Heinold et al, reference.

(Reply Br. 2.)

This argument is not persuasive. When the guide rail 7 of Heinold is aligned parallel with either guide rail 16 or 18 of Carper, it would form a linear aligned structure, thus clearly meeting the limitation of claim 1 of "a linear, aligned extension of said first guide rail."

For the foregoing reasons, we affirm the rejection of claim 1. Claims 2-5 and 7-9 fall with claim 1 because separate reasons for their patentability were not provided. 37 C.F.R. § 41.37(c)(1)(vii).

### Claim 13

Claim 13 comprises: 1) a magnetic resonance scanner; 2) a height-adjustable patient supporting apparatus, 3) a guide rail, and 4) a guide groove (*see supra* Claim Interpretation, at p. 6). The Examiner finds all these elements in the prior art and a reason to combine them (Answer 8-9).

Appellants contend that the Examiner erred because Heinold does not teach a "structural component" (App. Br. 9). However, we have interpreted claim 13 not to require the "structural component" (*see supra* Claim Interpretation, at p. 6). Thus, Appellants' argument relies on a limitation that is not found in claim 13. We affirm the rejection of claim 13.

## Claim 12

Claim 12 comprises a second step in which “second part” of a guide system is formed “on a structural component, separate from said patient supporting apparatus.” The Examiner contends that Heinold’s panel 5 meets the limitations of the “structural component separate from said patient supporting apparatus” of claim 12 (Answer 5, 7). We do not agree.

Panel 5 is arranged on a bed base (Heinold, at ¶ 22) and is used to support a patient (Heinold, at p. 2, claim 1, ll. 4-5; *see also* Fig. 1 showing the patient lying on the panel 5). Thus, panel 5 is a part of Heinold’s patient supporting apparatus – and is not “separate” or independent from it as we have interpreted claim 12 to require of the “structural support” (*see supra* Claim Interpretation, at p. 6). For this reason, we reverse the rejection of claim 12.

## CONCLUSION

In summary, we affirm the rejection of claims 1-5, 7-9, and 13 as obvious over prior art. We reverse the rejection of claim 12.

Appeal 2007-4547  
Application 10/726,251

TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED-IN-PART

Ssc:

SCHIFF HARDIN & WAITE  
PATENT DEPARTMENT  
6600 SEARS TOWER  
233 SOUTH WACKER DRIVE  
CHICAGO, IL 60606